yet observed any resistance of the gonococcus to antibiotics.

Serological Diagnosis in Gonorrhoea. A. A. GLYNN and P. J. WATT (Wright-Fleming Institute of Microbiology, St. Mary's Hospital Medical School, London, England) The increasing prevalence of gonorrhoea has accentuated the need for a serological diagnostic test, particularly in women with chronic or latent infections in whom cultural methods are unsatisfactory. However, a diagnostic test, to be useful, must be also highly specific and in the gonococcal field the general rule holds that increasing sensitivity is associated with decreasing specificity. While the choice of method is largely based on practical convenience, the appropriate specificity can be achieved only by finding suitable antigens. It is the search for these which is now occupying most workers. Results in our laboratories have shown that the choice of the gonococcal strains from which to prepare the antigen is extremely important.

Influence of Gonococcal Urethritis in Men on their Psychiatric State. R. GIARD (Cochin Hospital, Department of Urology, Paris, France)

Urogenital infections in males can influence, more than any other disease, the psychoemotional equilibrium of patients. The severity and duration of such psychic repercussions, usually represented by depression, depend essentially on the psycho-affective constitution of the patient, but the behaviour of the physician in diagnosing and treating genital infections can play an important role in resolving or worsening psychoemotional changes.

Some examples are reported in order to demonstrate the ideal behaviour of the physician in the presence of emotionally sensitive patients.

Thiamphenicol in the Treatment of Venereal Diseases. E. HEINKE (Army Central Hospital, Department of Dermatology, Coblenz, Germany)

580 patients suffering from gonorrhoea (379 from the Coblenz area, Central Rhineland District, and 201 from the Hamburg area) were treated with a single oral dose of 2.5 g. thiamphenicol.

Of the 379 cases (272 men, 107 women) from the Coblenz area, 374 (98.7 per cent.) were cured, and five (2 men and 3 women) (1.3 per cent.) relapsed.

Of the 201 cases from the Hamburg area, 195 (97 per cent.) were cured and six (3 per cent.) relapsed.

The overall results were considered very good, the total cure rate being 98·1 per cent.

The success of the treatment in ten patients with gonorrhoeal epididymitis was outstanding; six patients received 2.5 g. and four received 1.5 g. thiamphenical orally for 5 or 6 days, and all were cured.

The results of treatment of seventeen patients with non-specific urethritis (1.5 g. thiamphenicol daily for 5 to 8 days) were also good; fifteen patients remained free of relapse. Serial smears and cultures for gonococci showed that the bacteriostatic effect on *Neisseria gonorrhoeae* of 2.5 g. thiamphenicol in a single oral dose began between the second and third hours after administration.

With a single dose (2.5 g.) and repeated doses (1.5 g.) daily for 6 days) of thiamphenicol, no change in the peripheral blood picture could be demonstrated even after months. With the same dosage and conditions, no effect on spermatogenesis was observed.

Serial darkfield examinations of material from primary chancres showed that *Treponema pallidum* disappeared at the latest 72 hours after a single dose of 2.5 g. thiamphenicol, and the Herxheimer reaction did not occur after a subsequent injection of penicillin.

The tolerance of thiamphenicol in the form we used was excellent. Allergies and other side-effects such as gastric disturbances and vomiting were not observed.

## SECOND SESSION

The Current State of Treatment of Gonorrhoea with Reference to Decreased Penicillin Sensitivity of Neisseria gonorrhoeae. J. MAYER-ROHN (University Hospital Eppendorf, Clinic of Dermatology, Hamburg, Germany)

12 years ago it appeared that, as was the case with the sulphonamides, total resistance of Neisseria gonorrhoeae to penicillin would develop. In 1961 the average penicillin sensitivity of N. gonorrhoeae was about 0·164 units/ml. in contrast to 0·001 units/ml. in the years 1945 to 1956. However, the trend of increasing resistance did not progress and in 1969 in Hamburg the average sensitivity was 0·09 to 0·12 units/ml. The reasons for this behaviour are discussed. The current treatment for uncomplicated gonorrhoea is 5 m.u. penicillin\* in males and 10 m.u. in females. In cases of penicillin allergy, tetracycline, chloramphenicol, thiamphenicol, spiramycin, or other antibiotics can be used in high doses.

Experience in the Treatment of Gonorrhoea with Penicillin. F. NORTON-BRANDÃO (Central Dispensary of Social Hygiene (Director Dr. Cristiano Nina, M.D.,) Portugal)

Penicillin can still be used advantageously in the treatment of gonorrhoea, but the number of less sensitive strains of gonococci is reaching critical proportions. The increase in the resistance of gonococcal strains cannot easily be met by a further increase in dosage, because this would require the administration of injections of too great a volume.

In Lisbon, an 89 per cent. cure rate was achieved in male patients with a total dose of 8 m.u. aqueous procaine penicillin, given as 4 m.u. on two consecutive days.

With this dosage the failure rate was reduced to 11 per cent., from the 18 per cent. which was previously obtained with 4 m.u. administered in the same way, but this higher dosage seems to be very near the practical limits of administration.

We are thus faced with two problems, to find a substitute for the treatment of those cases which fail to respond to penicillin therapy and to find it immediately. This new drug should be used either alone or in some way to 'reinforce' the action of penicillin after simultaneous or consecutive administration.

<sup>\*</sup>Sodium penicillin G 4.5 m.u. and benzathine penicillin 0.5 m.u. administered with lignocaine hydrochloride 40 mg.